Chapter Seven

Implementing and Evaluating Your Watershed Plan

FOCUS

- Developing an action strategy
- The role of a watershed coordinator
- Sources of funding
- Evaluating your progress

Goals set, information gathered, technical agencies on board, decisions made, plan drafted—now what?

Implementation is the ***how we're going to get there*** phase. The implementation section of a watershed plan lays out, in sufficient detail for general understanding, the who, what, how, and when of all the tasks that will get the group to its goals. To carry out each task, an ***action strategy*** is needed.

Having an action strategy

1. Increases the likelihood that the solution will be implemented effectively and on time.
2. Prevents the group from underestimating the time and resources needed to get a task done.
3. Prevents people being 'volunteered' for work without checking with them first.
4. Shows when complex tasks need to be broken down into parts.

Developing an action strategy

An action plan lays out each task, date to be completed, resulting products, resources needed, and responsible persons. While the group may find that documenting these details is tiresome and less exciting than going out and doing something, an action strategy is critical for all but the simplest projects.

You can use any format you are comfortable with; a common approach is to develop a table similar to the one that follows:

Action plans may be included in the watershed plan, or may be for internal use.

Task: Hold a nutrient-management workshop for agricultural producers on January 10th.

Steps	Why this step?	Start date	Completion date	Resources needed	Who is responsible?	Checkpoints	Results
Determine location	to provide a good facility	10/1	12/1	room rental fee, overhead screen, flipchart	Joe	October & November meetings	Room reserved
Provide mailing list	to reach all landowners	9/15	12/1	computer at SWCD office, postage	Tom		Mailings sent to landowners
Arrange for speakers	to get information across	9/15	12/1	reimburse speakers for lunches and mileage	Marie & Jeff		Speakers have agreed to come

. . . and so on, to include publicity, getting enough chairs, exhibitor booths, coffee and donuts, commercial sponsors, reproducing handouts, et cetera.

Checkpoints

Every action strategy should include the points at which the people carrying out the tasks need to report back to the main group. This is especially important if subcommittees have been set up for education, public relations, technical assistance, and other group functions. Each checkpoint should state the ***date*** (or stage in the action) when the report should be made, the ***products*** that need to be complete at that time (such as completed mailing lists, lists of potential sponsors, draft newsletter, or whatever), and ***who*** is responsible for checking in with the main group.

Checkpoints prevent overlaps in effort and misunderstandings about what is supposed to be happening. They provide an opportunity for modifying the action strategy if necessary. They also might show when the subcommittee can ask for additional help or resources, let the main group know about progress, or solicit ideas on dealing with barriers they may have encountered. *Having definite checkpoints set up in advance makes it easy to get these items on the meeting agenda so they don't get glossed over or forgotten.*

Should you hire a coordinator?

Since a watershed group is made up of volunteers, the group may want to consider hiring a coordinator at some point. It can be tough to get the phone calling, letter writing, personal contacts, grant writing, plan development, task tracking, et cetera done in somebody's spare time. A coordinator can

- attend to necessary details;
- organize events;
- pull together water monitoring efforts;
- attend other meetings useful to the group and report back;
- act as librarian for inventory data, minutes, correspondence, and mailing lists;
- pull together and write up parts of the watershed plan;
- present the group's plans to others; and
- coordinate additional functions based on the needs of your watershed.

Funding for a coordinator could come from a grant or contract, or through a local organization that is supported by the county government (such as the SWCD), or through job-sharing or internship. The first

step in hiring a coordinator should be to draw up a detailed list of duties and expectations, so you are clear about the qualifications you are looking for. Contact other groups that have a coordinator and ask for job descriptions, copies of contracts, and what they would have done differently. It is also helpful to talk to other currently employed coordinators. *(There is a list of watershed project contacts in Chapter Four.)*

Submitted by a real, live coordinator:

"A watershed coordinator can wear many hats: fund-raiser, cheerleader, coach, educator and more. The following duties are an example of the work done by a coordinator of one project in Indiana. Your project may take a different approach; however, many of the listed duties are crucial to the success of any watershed project.

'The Watershed Coordinator shall . . .'

- Provide staff leadership to the steering committee of the watershed project. Guide them in problem identification, plan development, and implementation. Assist the steering committee team-building. Educate the steering committee, as needed, on various topics through personal knowledge, qualified people, articles, maps, or other materials.
- Assist the steering committee in building the watershed partnership. Gather support from businesses, organizations, and government agencies.
- Provide leadership and guidance to the steering committee in the development of a watershed management plan and in the implementation of the plan.
- Assist subcommittees, as needed, with determining problems within the watershed and assist with recommendations regarding solutions to specific problems. Act as a facilitator when needed. Communicate the needs/actions of the steering committee to subcommittees and vice versa.
- Work with the sponsors, interested local organizations, and representatives of other federal and state agencies to determine and coordinate data required to further the project.
- Work closely with the staffs of governmental agencies that have ties or need ties to the project. Promote "water quality" programs.
- Obtain necessary materials, technical information and services needed to keep the project plan current.
- Assist the steering committee and sponsors in designing and carrying out an effective information and education program within the watershed to meet the needs of diverse audiences with tailored activities on a regular basis. Inform the general public of the project goals and activities on a continuing basis through newspaper articles, radio, newsletters, television and other personal appearances. Maintain working relationships with all the news media within the watershed. Keep everyone involved up-to-date! Remind them of their importance to the entire project.
- Coordinate activities such as school programs, campaigns, field days, tours, workshops, pilot projects, and any other public activities.
- Assist the steering committee with pursuing funding opportunities and writing grant proposals.
- Keep abreast of current developments and new programs that may further assist the project; relay significant information and data to partners involved in the project.
- Prepare special reports as needed.
- Keep the watershed community and its partners informed via telephone calls, meeting minutes, personal visits or memos.

In short, the coordinator is the glue that connects the many different parts of a watershed project. Often he or she is the only staff person working with a group of volunteers. When you see a watershed coordinator, you should see a motivator!"

Funding, programs and grants

When the group has a clear idea where it is going and how it wants to get there, look for a source of support for the projects to be implemented. Consider existing programs that the group can promote to meet its goals. For instance, the group could publicize and encourage landowners to participate in the Conservation Reserve Program (CRP). Some support comes through programs that establish priority areas in which to focus funds, such as IDNR's Lake & River Enhancement program, or the Conservation Priority Areas designated each year for the NRCS Environmental Quality Incentive Program (EQIP). Some support will come through grants for specific purposes.

It is best not to seek money in the early stages while the group is still forming. It can work against a group to get grant or program funds before it is ready to spend them intelligently. When focused on getting a grant, the group sometimes loses sight of easier and better ways to get things done right in its own back yard. Also, until the group has developed at least the skeleton of a plan, it may request money for something and find out that when the contract is awarded, it really wants to do something else. *The worst possible time to plan is after the money shows up!*

The following list of support sources is not all inclusive, but provides plenty of places to start. Phone numbers are in the Appendix B: Contacts.

Funding sources for watershed projects

Federal Conservation and Watershed Projects

EPA

Section 319, 604(b), and 104(b)3 Grants

Grants for conservation practices, water body assessment, watershed planning, and watershed projects. Available to non-profit or governmental entities. These monies, enabled by the Clean Water Act, are funneled through the Indiana Department of Environmental Management. *See IDEM for details.*

EPA GREAT LAKES

Numerous sources of funding are available for the area that drains into the Great Lakes. The complete grants guidance and application package for EPA Great Lakes grants is on the web, and additional funding sources are at the Great Lakes Information Network (http://www.great-lakes.net) Grants are submitted in early spring for most of these sources.

USDA *(See county listings for local federal agency contacts.)*

EQIP: Environmental Quality Incentive Program. Administered by the Natural Resources Conservation Service. Conservation cost-share program for implementing Best Management Practices, available to agricultural producers who agree to implement a whole-farm plan that addresses major resource concerns. Up to $50,000 over a 5 to 10 year period. Some parts of the state are designated Conservation Priority Areas and receive a larger funding allotment.

WRP: Wetland Reserve Program. Administered by the Natural Resources Conservation Service. Easement and restoration program to restore agricultural production land to wetland. Easements may be for 10 years, 30 years, or permanent. Longer easements are preferred. Partnerships with other acquisition programs are encouraged. Restoration and legal costs are paid by NRCS. Landowner retains ownership of the property and may use the land in ways that do not interfere with wetland function and habitat, such as hunting, recreational development, and timber harvesting.

CRP: Conservation Reserve Program. Administered by the Farm Service Agency with technical assistance from NRCS. Conservation easements in certain critical areas on private property. Agricultural producers are eligible. Easements are for 10 or 15 years, depending on vegetative cover, and compensation payments are made annually to replace income lost through not farming the land. Cost share is available for planting vegetative cover on restored areas.

WHIP: Wildlife Habitat Incentive Program. Administered by the Natural Resources Conservation Service. Cost share to restore habitat on previously farmed land. Private landowners who are agricultural producers are eligible. Cost share up to 75%, and contracts are for 10 years.

FIP: Forestry Incentive Program. Administered by the Natural Resources Conservation Service. Cost-share to assist forest management on private lands. Funds may be limited.

US Fish & Wildlife Service

Partners for Wildlife: assistance for habitat restoration.

State Conservation and Watershed Programs

IDNR Division of Soil Conservation

L&RE: The Lake & River Enhancement Program funds diagnostic and feasibility studies in selected watersheds and cost-share programs through local Soil & Water Conservation Districts. Project oversight provided through county-based Resource Specialists and Lake & River Enhancement Watershed Coordinators. Funding requests for Watershed Land Treatment projects must come from Soil & Water Conservation Districts. If a proposed project area includes more than one district, the affected SWCDs should work together to develop an implementation plan. The SWCDs should then apply for the funding necessary to administer the watershed project.

Before applying for funding, the SWCDs should contact the Lake & River Enhancement Coordinators to determine (1) the appropriate watershed to include in the project, (2) whether the proposed project meets the eligibility criteria, and (3) whether funding is available.

IDNR Division of Fish & Wildlife

Classified Wildlife Habitat Program: Incentive program to foster private wildlife habitat management through tax reduction and technical assistance. Landowners need 15 or more acres of habitat to be eligible. IDNR provides management plans and assistance through District Wildlife Managers. (See county listings.)

Wildlife Habitat Cost-share Program: Similar to above.

IDNR Division of Forestry

Classified Forest Program: Incentive program to foster private forest management through tax reduction and technical assistance. Landowners need 10 or more acres of woods to be eligible. IDNR provides management plans and assistance through District Foresters. (See county listings.)

Classified Windbreak Act: establishment of windbreaks at least 450 feet long adjacent to tillable land. Provides tax incentive, technical assistance through IDNR District Foresters.

Forest Stewardship Program & Stewardship Incentives Program: Cost share and technical assistance to encourage responsibly managed and productive private forests.

IDNR Division of Reclamation

Appalachian Clean Streams Initiative: Funds for acid mine drainage abatement.

IDNR Division of Nature Preserves

State Nature Preserve Dedication: acquisition and management of threatened habitat.

IDEM Office of Water Management

State Revolving Fund: available to municipalities and counties for facilities development. Will be available in 1999 for nonpoint source projects as well. Funding is through very low-interest loans.

Section 319 Grants: available to nonprofit groups, municipalities, counties, and institutions for implementing water quality improvement projects that address nonpoint source pollution concerns. Twenty-five Contacts percent match is required, which may be cash or in-kind. Maximum grant amount is $112,500. Projects are allowed two years for completion. Projects may be for land treatment through implementing Best Management Practices, for education, or for developing tools and applications for state-wide use.
Section 205(j) Grants, formerly called 604(b) Grants: available to municipalities, counties, conservation districts, and drainage districts. These are for water quality management projects such as studies of nonpoint pollution impacts, nonagricultural NPS mapping, and watershed management projects targeted to Northwest Indiana (including BMPs, wetland restoration, et cetera.)
Section 104(b)(3) Grants: These are watershed project grants for innovative demonstration projects to promote statewide watershed approaches for permitted discharges, development of stormwater management plans by small municipalities, projects involving a watershed approach to municipal separate sewer systems, and projects that directly promote community based environmental protection. NOTE: The deadline for IDEM'S grants programs is annually, by March 31st.

Private Funding Sources

National Fish and Wildlife Foundation.
1120 Connecticut Avenue NW, Suite 900, Washington DC 20036. Nonprofit, established by Congress in 1984, awards challenge grants for natural resource conservation. Federally appropriated funds are used to match private sector funds. The six program areas are wetland conservation, conservation education, fisheries, migratory bird conservation, conservation policy, and wildlife habitat.

Utilities (check local utilities such as IPALCO, CINergy, REMC, NIPSCO.
Many have grants for educational and environmental purposes.)

Indiana Hardwood Lumbermen's Association
Indiana Tree Farm Program

The Nature Conservancy
Land acquisition and restoration.
Southern Lake Michigan Conservation Initiative
Blue River Focus Area
Fish Creek Focus Area
Natural Areas Registry
Hoosier Landscapes Capitol Campaign

Conservation Technology Information Center (CTIC)
Know Your Watershed educational materials are available

Indiana Heritage Trust
Land acquisition programs

Ducks Unlimited
Land acquisition and habitat restoration assistance

Sycamore Land Trust
Acres Inc. (land trust)
Oxbow, Inc. (land trust)

Sources of additional funding opportunities

Catalog of Federal Funding Sources for Watershed Protection
EPA Office of Water (EPA841-B-97-008) September 1997

GrantsWeb: www.srainternational.org/cws/sra/resource.htm

How are we doing?

Using indicators to evaluate your progress

One of the most important things the group will do is evaluate whether the plan is actually making a difference. Many plans don't even mention evaluation, yet without some conscious process, how will you know whether you have met your goals?

Early on, when the group was discussing measurable goals and thinking about developing a water monitoring program, someone may have mentioned *indicators.* These are things in the environment or community that you can measureand that indicate whether things have gotten better or worse and by how much. Indicators fall roughly into two categories—administrative and environmental.

Administrative indicators are beans that you can count: the number of permits issued, the number of grassed waterways installed, the number of acres converted to no-till corn, the number of cans collected at a recycling center, and so on. They are usually easy numbers to come up with, but they are often indirect indicators of what you really want to know. Counting the number of feet of grassed waterway is a useful measure of work done, but it will not tell you whether the amount of sediment entering the stream has actually decreased.

Environmental indicators are measurements of water quality, habitat, or some other criterion that tells you something about the health of the environment. They include such things as the amount of phosphorus or nitrogen in the water, macroinvertebrate population diversity, the growth of algae in lakes, the turbidity of the water, occurrences of certain species, or the mercury content in fish tissue. These indicators require more time, resources, and planning than do administrative indicators, but they usually are better ways to evaluate progress. When a group is developing goals, it can plan ahead for what indicators will need to be measured to track progress for each goal.

Technical assistance agencies can help the group choose and measure indicators. The group may also be able to piggyback on the efforts of certain agencies that are already gathering environmental or administrative data for other purposes. The following are some further examples of indicators:

Examples of Indicators

Indicator Type	Indicators
These document the extent to which program or regulatory actions have been taken.	Number of permits reissued with new limits Number of point sources in substantial noncompliance Elapsed time from identification of permit violations to correction Amount of fertilizer sold or used Number of communities enacting strom water ordinances Number of public water systems with source water protection plans Number of citizens reached with public education efforts
These quantify the extent to which actions have led to reduction in threats to surface or groundwater quality.	Reduction in nutrient loadings from each type of point and nonpoint source Stability and condition of riparian vegetation Percent impervious surface upstream General erosion rate upstream Amount of toxics discharged by spills Number of businesses and households that have altered behaviors or processes to reduce pollutants
These measure the extent to which water quality has changed.	Pollutant concentrations in the water columns, sediments, and goundwater Frequency of restrictions on water uses (bathing, drinking) Percent of stream miles that support each designated use Percent with impaired or threatened uses Percent of citizens who rate major water bodies as usable for various recreational activities
These measure direct effects on the health of humans, fish, other wildlife, habitat, economy, et cetera	Aquatic community indexes Reduction in waterborne disease in humans Size of wetlands or riparian habitat acres Size of recreational and commercial fish habitat Increased jobs and income due to recreation

Review your plan regularly

Agree on a regular time, perhaps quarterly, when the group will pull out the watershed plan, blow off the dust, and review what it says. Watershed plans should be living documents that can be changed or added to as needed. After all, you wrote it! You have the right to scribble in the margins, add new pages, and cross things out.

When the group accomplishes some piece of the plan, celebrate and let the community know about it. Recognize the people who helped.

Plan to revise the plan; plans are often written with a certain time frame in mind. Three to five years seems to be as much of our lives as we want to envision being tied up in a project. State at the end of the watershed plan when it will be revised or considered finished. This lets the community and the members know what to expect.